

IN THE CLAIMS:

1. (Currently Amended) A method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of ~~said~~ devices planned to be manufactured;

exploding each of said devices planned to be manufactured into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required; and

providing said total volume of assembly components required to assembly component manufacturers; and

performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing,

wherein said devices planned to be manufactured share one or more of said components and said assemblies share one or more of said assembly components.

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2. (Currently Amended) The method in claim 1, wherein said process of determining a production quantity comprises forecasting sales volumes for each of said devices planned to be manufactured.
3. (Cancelled).
4. (Currently Amended) The method in claim 1, further comprising, before said providing of said total volume of assembly components required, identifying substitute components.
5. (Original) The method in claim 1, wherein some of said components comprise critical components.
6. (Original) The method in claim 5, wherein said critical components comprise components having a level of supply insufficient to meet demand and having no available substitute components.
7. (Cancelled).
8. (Currently Amended) A method of forecasting component requirements for devices being manufactured, said method comprising:
determining production quantities of ~~said~~ devices planned to be manufactured;

exploding each of said devices planned to be manufactured into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;

multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required;

identifying critical components and critical assembly components as ones having levels of supply insufficient to meet demand and having no available substitute components; and

calculating a volume of each critical component and critical assembly component required to manufacture said devices planned to be manufactured based on said total volume; and

performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing,

wherein said devices planned to be manufactured share one or more of said components and said assemblies share one or more of said assembly components.

9. (Currently Amended) The method in claim 8, wherein said process of determining a

production quality comprises forecasting sales volumes for each of said devices planned to be manufactured.

10. (Cancelled).

11. (Currently Amended) The method in claim 8, further comprising, before said providing of said total volume of assembly components required, identifying substitute components.

12. (Cancelled).

13. (Currently Amended) A method of forecasting component requirements for devices being manufactured, said method comprising:

determining production quantities of said devices planned to be manufactured;

exploding each of said devices planned to be manufactured into first level components to generate required first level component volumes, wherein said first level components include assemblies;

multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;

exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly; and

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multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required; and

~~wherein said forecasting is performed using~~ performing a minimum profile technique that removes all ordering parameters including order minimums, order maximums, leadtimes, transit times, and order sizing.

wherein said devices planned to be manufactured share one or more of said components and said assemblies share one or more of said assembly components.

14. (Currently Amended) The method in claim 13, wherein said process of determining a production quantity comprises forecasting sales volumes for each of said devices planned to be manufactured.

15. (Cancelled).

16. (Currently Amended) The method in claim 13, further comprising, before said providing of said total volume of assembly components required, identifying substitute components.

17. (Original) The method in claim 13, wherein some of said components comprise critical components.

18. (Original) The method in claim 17, wherein said critical components comprise

components having a level of supply insufficient to meet demand and having no available substitute components.

19. (Currently Amended) A program storage device readable by machine tangibly embodying a program of instructions executable by said machine for performing a method of forecasting component requirements for devices being manufactured, said method comprising:
- determining production quantities of said devices planned to be manufactured;
 - exploding each of said devices planned to be manufactured into first level components to generate required first level component volumes, wherein said first level components include assemblies;
 - multiplying said first level component volumes for each device by a corresponding production quantity of said production quantities to determine a total volume of first level components required, wherein said total volume of first level components includes assembly volumes;
 - exploding each of said assemblies into assembly components to generate required assembly component volumes for each assembly;
 - multiplying said assembly component volumes for each assembly by a corresponding assembly volume of said assembly volumes to determine a total volume of assembly components required; ~~and~~
 - providing said total volume of assembly components required to assembly component manufacturers; and
 - performing a minimum profile technique that removes all ordering parameters including

order minimums, order maximums, leadtimes, transit times, and order sizing,

wherein said devices planned to be manufactured share one or more of said components
and said assemblies share one or more of said assembly components.

20. (Currently Amended) The program storage device in claim 19, wherein said process of determining a production quality comprises forecasting sales volumes for each of said devices planned to be manufactured.

21. (Cancelled).

22. (Currently Amended) The program storage device in claim 19, further comprising, before said providing of said total volume of assembly components required, identifying substitute components.

23. (Original) The program storage device in claim 19, wherein some of said components comprise critical components.

24. (Original) The program storage device in claim 23, wherein said critical components comprise components having a level of supply insufficient to meet demand and having no available substitute components.

25. (Cancelled).

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